

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number  
WO 2005/037236 A3

(51) International Patent Classification<sup>7</sup>: C07K 7/00, 1/06, 7/08, 9/00, A61K 38/08, 38/10, 38/16, C07H 21/04, C12N 15/74, 15/85

(21) International Application Number:  
PCT/US2004/034989

(22) International Filing Date: 15 October 2004 (15.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/512,211 17 October 2003 (17.10.2003) US  
60/530,306 16 December 2003 (16.12.2003) US

(71) Applicant (for all designated States except US): ARIZONA BOARD OF REGENTS [US/US]; The Brickyard, 699 S. Mill Ave., Suite 601, Room 691AA, Tempe, AZ 85281 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BROPHY, Colleen [US/US]; 15301 North 109th Street, Scottsdale, AZ 85255 (US). FURNISH, Elizabeth [US/US]; 135 W. Hu-Esta Drive, Tempe, AZ 85282 (US). KOMALAVILAS, Padmini [US/US]; 900 West Grove Parkway #1109, Tempe, AZ 85283 (US). DREIZA, Catherine [US/US]; Arizona State University/ECG, Building ECG Room 334, Tempe, AZ 85287 (US). JOSHI, Lokesh [US/US]; 1143 East Sandpiper Drive, #210, Tempe, AZ 85283 (US). PANITCH, Alyssa [US/US]; 3703 East Indigo Bay Court, Higley, AZ 85236 (US).

(74) Agent: HARPER, David, S.; McDonnell Boehnen Hulbert & Berghoff LLP, 300 South Wacker Drive, Suite #3100, Chicago, IL 60606 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
29 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL HEAT SHOCK PROTEIN 20-RELATED POLYPEPTIDES AND USES THEREFOR

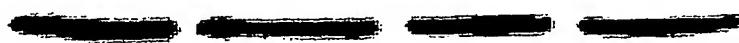
1

2

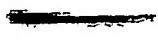
3

4

Cofilin



p-Cofilin



WO 2005/037236 A3

(57) Abstract: The present invention provides novel HSP20-based polypeptides and pharmaceutical compositions thereof, and methods for using such polypeptides and pharmaceutical compositions for various therapeutic uses.